DOCUMENT RESUME

ED 218 315 TM 820 355

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TITLE An Outcome-Based Model for School Evaluation and Program Development.
PUB DATE Mar 82
NOTE 62p.; Paper presented at the Annual Meeting of the American Educational Research Association (66th, New York, NY, March 19-23, 1982). Appendix C marginally legible.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Educational Planning; Educational Practices; *Evaluation Methods; Models; *Program Development; *Program Evaluation
IDENTIFIERS *Learner Based Accountability System; Texas

ABSTRACT

A recently developed and state-validated model of school evaluation and program development is now being used in 174 Texas school districts. The Learner-Based Accountability System (LBAS) is a model for school evaluation and program development geared toward the improvement of school practices. The 11 components of the system incorporate the implementation, management, and utilization of curriculum and school evaluation data for practical classroom applications and policy-setting. Data captured from over 150,000 students have indicated that the focus provided through curriculum orchestration, evaluative feedback, and need-specific intervention favorably affected teachers' use of the curriculum and local district program planning. With the large number of schools already participating in the LBAS, an awareness of the project and its impact in the schools can add to the knowledge base for effective program planning and evaluation practices. The model has the potential to direct future lines of inquiry into school evaluation and program development by stimulating interest in the replication, embellishment, and/or refinement of such improvement-oriented systems. (Author/PN)

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AN OUTCOME-BASED MODEL FOR SCHOOL EVALUATION AND PROGRAM DEVELOPMENT

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Paper prepared for presentation at the annual meeting of the American Educational Research Association, New York, March 19-23, 1982

AN OUTCOME BASED MODEL FOR SCHOOL EVALUATION AND PROGRAM DEVELOPMENT

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The purpose of this paper is to present a recently developed and state-validated model of school evaluation and program development currently in place in 174 districts in the state of Texas.

The model presented here was developed in response to research which suggests that wide and notable differences may exist in the curriculum at the state, regional, district, and campus level, (Committee on Youth Education for Citizenship, 1980; Goodlad, 1979; Patterson & Czajkowski, 1979) such that instruction in schools has appeared articulated neither in educational policy or practice (Goodlad, 1978). These inconsistencies have resulted in what many have termed "patchwork" curricula rather than well-defined programs.

The great diversity in focus has led many to argue that what is missing in schools is a common set of experiences for students geared toward essentials (Goodlad, 1979; Savage, 1978; Trogdon, 1978). Many state that some sort of systematic curriculum implementation process is needed to insure quality of instruction, to direct focus on essentials in schooling, and to improve educational effectiveness (Groff, 1980; Loucks, 1979; McKenzie, 1980; Pratt, 1979). Other researchers and practitioners (Fry and McLaughlin, for example, 1979) have added that improved student outcomes in essential skills will only be effected if curriculum programs are integrated with other grade levels as they are implemented.

This paper presents the Learner-Based Accountability System (LBAS), a model for school evaluation and program development geared toward the improvement of school practices. The system defines essentials, orchestrates curriculum implementation efforts, manages criterion-referenced testing activities,

identifies effective schools, campuses, and classes, and trains personnel to use objective-based evaluation results. In this way, the LBAS incorporates the implementation, management, and utilization of specified curriculum and evaluative testing activities and provides for improved data colleciton capabilities and methods for translating this information into practical classroom applications as well as policy-making tools.

Data Base

The Learner-Based Accountability System was developed through the initiative of the Region 10 Educational Service Center in Richardson, Texas. Twenty-seven school districts installed LBAS in 1979-1980, involving 28,484 students, 73 campuses, and 1,097 teachers. During the 1980-1981 school year, fifty-two districts with 4,356 teachers and 100,906 students implemented the system in Language Arts and/or Mathematics. The most recent figures for 1981-82 indicate that 147,677 students and 5,023 teachers will participate in two curriculum areas from 71 school districts.

Point of View

The presentation of this model offers practical methodologies for improved school practices. Eleven components in the LBAS model address current educational concerns by providing a means for orchestrating curriculum, defining responsibilities, and monitoring test data so that educators can effectively manage program development and school evaluation. In the following section, each of these components will be discussed in detail along with the specific activities utilized to facilitate the tasks inherent in Components 1-11.

THE LBAS MODEL: A MODEL FOR SCHOOL EVALUATION AND PROGRAM DEVELOPMENT

Component 1: Formulating Objectives

Figure 1 presents a schematic of the LBAS model. Components 1, 2, and 3 in the model are preparatory to the operational implementation of the

LEARNER–BASED ACCOUNTABILITY SYSTEM

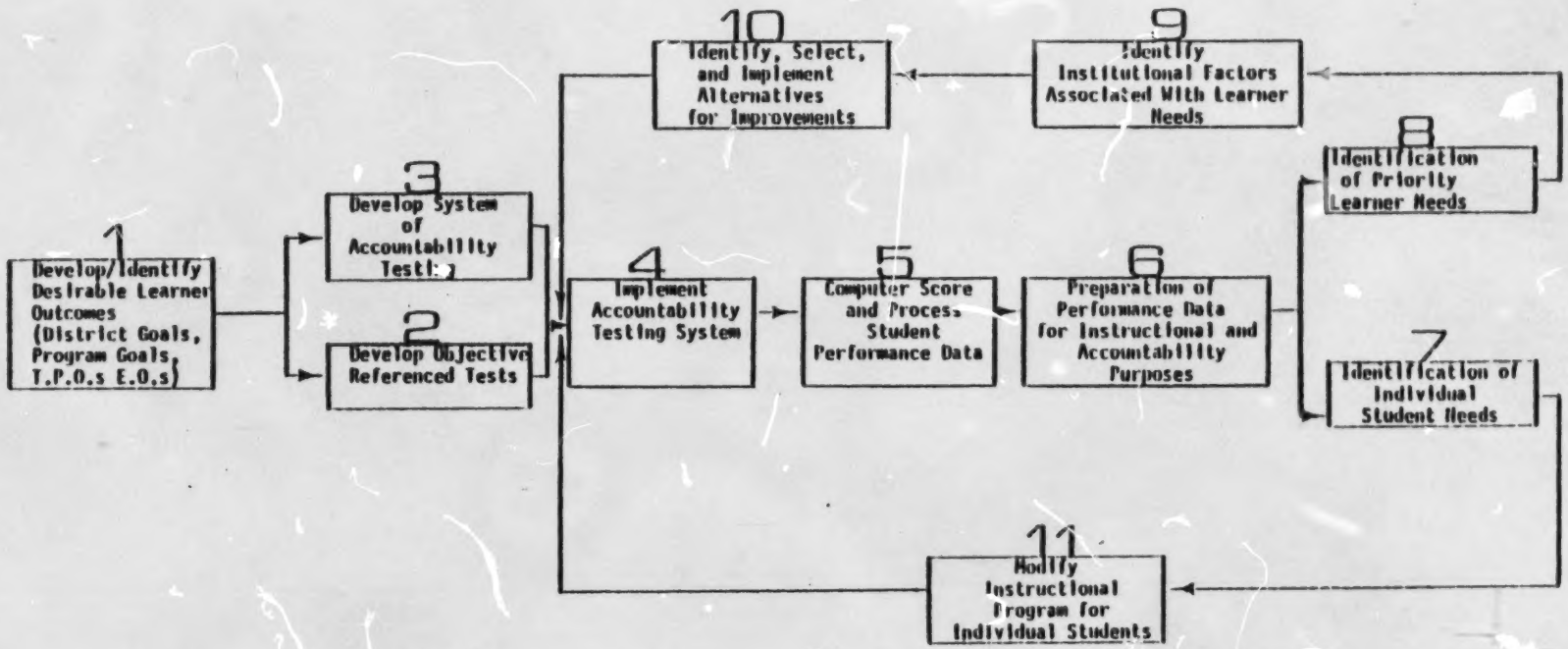


Figure 1

system. Specifically, in Component 1, district personnel formally adopt desired learner outcomes in the curriculum area of focus. Learner outcomes are generated in a broad-to-precise fashion, emanating from Program Goals (PG's), to Terminal Performance Objectives (TPO's), to Enabling Objectives (EO's). This task is accomplished through a process involving teachers from across all grade levels to be served and appropriate administrators.

The system utilizes five specific activities to facilitate the task inherent in Component 1. These activities along with brief explanatory remarks are presented below.

Activity 1: Conduct Orientation Meeting with Local Facilitators Representing Individual Districts Within the Cooperative

A local facilitator is named for each participating district to manage project activities at the local level. Developer/demonstrator consultants provide needed expertise via orientation sessions at the beginning of the school year.

Due to the sophistication of the Learner-Based Accountability System, facilitators attend at least one training session every two months for the duration of the project year.

The first meeting is designed to accomplish the following purposes.

(1) to provide a specific orientation to the Learner-Based Accountability System.

(2) to provide a review of the commitments of each district to adoption procedures.

(3) to review the duties and responsibilities of the local facilitator.

(4) to review generally the logistics of the installation process.

(5) to provide a detailed description of procedures to be used to specify instruction (i.e., put in place a hierarchy of goals and objectives to serve as an instructional guideline). Each successive large group meeting of facilitators is designed to address specific installation and evaluation tasks. (See Appendix A for example of timelines for installation, evaluation, and program planning processes.)

Activity 2: Review, Analyze and Customize Goal Statements

The Learner-Based Accountability System's master banks of student objectives are computerized and exist on disk files that are managed by and accessed through North Texas Multi-Regional Processing Center's IBM Computer. Each master bank of objectives consists of program goals, terminal performance objectives and enabling objectives arranged in a hierarchical sequence from the very global to the very specific. The computer program used to establish, modify, and access these computer banks provides flexibility for the user. Each master bank (i.e., computer file) exists with goals and objectives numbered and arranged in the designed hierarchy by grade level; however, the flexible program design allows users to retrieve goals and objectives in many formats. For example all or portions of the number can be suppressed as well as specific parts of the objectives file.

Developer/demonstrator consultants provide each local district with a list of program goals and terminal performance objectives as

they exist in the master bank. Initially, a group of local educators consisting of administrators, supervisors, and teachers determine the future utility and the directional influence of program goals and terminal performance objectives. The group then is charged with the responsibility of modifying, adding, and/or deleting program goals and terminal performance objectives from a paper copy of the master bank.

Local adaptions of master bank program goals and terminal performance objectives are retained for potential changes after customizing and sequencing enabling objective statements. In essence, program goals and terminal performance objectives serve as a structure for the more specific enabling objective statements. Therefore, program goals and terminal performance objectives are not finalized until after local adaptations of enabling objective statements have been made and couched within the structure of program goals and terminal performance objectives.

In summary, specific procedures are followed to adapt program goals, terminal performance objectives and enabling objectives to each participating district's desires.

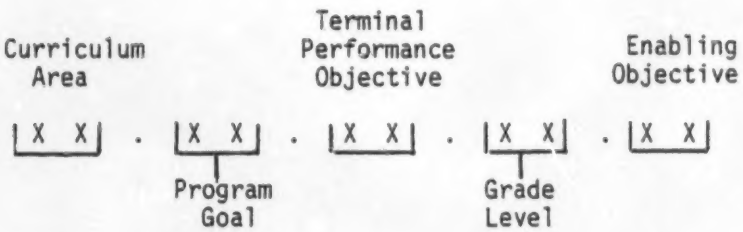
Activity 3: Customize Enabling Objectives to Local Preference

After districts have specified program goals and terminal performance objectives, teachers are given an opportunity to customize enabling objectives. Small committees composed of related grade-level teachers review and tailor master bank enabling objectives by following a well-defined process. Committees delete items entirely from the bank,

transfer an enabling objective from one grade level to another, modify the wording of an objective, or create a new enabling objective to add to their local bank. A fifth option is to accept an objective as it appears in the master bank.

Activity 4: Initialize Computer Files for Each District Within the Cooperative

Each goal and objective statement in a district's customized bank is numbered. Since the computer stores objectives and eventually processes student performance data relative to enabling objectives and aggregates student performance data by program goals and terminal performance objectives, the following numbering scheme has been devised to accommodate both computer banking and processing.



The XX's represent two-digit number codes. According to the above numbering scheme, a program goal statement is numbered with a four-digit number, that is, a two-digit code for the curriculum area followed by a two-digit code for the program goal. A terminal performance objective is numbered with a six-digit number and an enabling objective with a ten-digit number. It should also be noted that the enabling objective is the only objective that is grade-level specific. All goals and objectives are numbered according to this numbering scheme. Once numeration has been completed, local personnel develop and write shorthand

or abbreviated descriptions of the goals and objectives to be used in the Learner-Based Accountability System reporting process. Both complete and shorthand goal and objective statements are then stored on computer disk files.

Computer file initialization for each district occurs at the developer/demonstrator site and is performed by developer/demonstrator staff. (See Appendix B for example of Objectives Banking.)

Activity 5: Produce Computer Printouts of Local Objective Banks

When compared to a typewritten copy of local objectives, a computer file of local objectives has certain advantages. Computer printouts can be produced incorporating major changes much more efficiently than manually produced paper copies. For example, if a district decides to move an enabling objective from the fourth grade to the third grade, it is a simple task using the computer bank, but it is a major typing job if the bank exists only in paper form. Another advantage of computer files is the flexibility in displaying the objectives bank on paper. As previously described, the banking program provides a number of options in output formats. For example, grade level outputs may be generated for teacher use. That is, the computer program will search the file and print all objectives to be taught at a specific grade--the essence of a curriculum guide for a teacher.

After local files are initialized, computer printouts of objectives by grade level, by program goal, etc., are computer-produced for each district, proofed, corrected, re-produced, and distributed locally under the direction of the facilitator.

COMPONENTS 2-6: EVALUATING

Components 2-6 describe the development, administration, and scoring of assessment instruments.

Specifically Component 2 includes the development of assessment instruments to determine student performance levels relative to desired outcomes specified in Component 1. Assessment instruments are produced for each grade level in each curriculum area in accordance with adopted learner outcomes.

In Component 3, district personnel determine when tests will be administered, who will perform selected functions associated with test administration, and what specific strategies and schedules will be implemented to utilize reports of student performance.

Components 4, 5, and 6 are ongoing operations and serve functionally as integral aspects of two cyclical loops of the total system. Component 4 includes the actual administration of the criterion-referenced assessment instruments, whereas Component 5 represents the scoring of student answer sheets. Component 6 involves the arranging of student data in report format to be used by teachers and administrators. Tasks inherent in Components 5 and 6 are accomplished through specially designed computer programs.

Eight special activities drive the evaluation process in Components 2-6. These activies are described below:

Activity 1: <u>Match Master Bank Test Items to Customized List of Local Objectives</u>

Each enabling objective included in the master bank is supported by four objective-referenced test items. Supporting test items exist

only in paper form and are filed according to master bank objective number. Each test item has been "tested" for reliability and validity.

Facilitators representing participating districts in concert with developer/demonstrator consultants match local objectives to master bank objectives. Those local objectives modified or added to the master bank require that test items be modified and/or added. A list of those enabling objectives for which test items do not exist is made and used in Activity 2. Test questions for those enabling objectives which have not been changed in intent are claimed from the master files. A photo-ready typeset copy of each set of four questions is reproduced and numbered with a locally assigned 10-digit number.

Activity 2: Develop/Adapt Test Items to Measure Unique Enabling Objectives

Enabling objective statements for which test items do not exist are printed from the local district computer bank of objectives. This list is used to guide a local effort to develop a set of four test items for each enabling objective on the list. Test items are developed, critiqued, and typed in a format which accommodate administration to students.

Activity 3: "Test" New Test Items

All test items developed to complement the master file of test questions are "tested". Curriculum area experts review objectives for the purpose of establishing face validity. Test items are collectively reproduced and administered to students in a test/retest mode for the purpose of checking item reliability. Newly developed test items are collectively administered to a group of students, and approximately two weeks later,

readministered to the same students. Student answers on both the test and retest are captured on scannable answer sheets. Student responses are used to: (1) generate reliability coefficients and (2) generate a test/retest matrix for each test item. Test/retest matrices are used to improve test questions by isolating and eliminating weak distractors.

Activity 4: Produce Photo-Ready Copy of Student Test Booklets

Student test booklets are composed of master file test items and locally developed test items previously tested and refined. Master file test items exist in photo-ready copy, and a print-ready copy of locally developed test items is produced and numbered with the ten-digit number of the related enabling objective. These photo-ready copies of test items are combined with the master file test items and organized into grade level tests with accompanying test directions and necessary supplemental oral instructions for use by teachers.

Activity 5: Reproduce Necessary Copies of Test Booklets

Initial costs for reproducing student test booklets are borne by each participating district. Therefore a decision is made relative to the number of student test booklets needed for each grade, prior to making copies.

Activity 6: Provide Orientation to Test Facilitators

In keeping with the Learner-Based Accountability System, Facilitators receive detailed orientation to the procedures of capturing student performance data. District or test header forms, campus header forms, and group or class header forms are specifically designed for the Learner-Based Accountability System and are reviewed with test administrators.

Terminal error verification, "bubble" checking techniques, and packaging/delivery instructions are additional orientation items communicated to all test administrators.

Activity 7: Capture Student Performance Data

Student performance data is captured within the regular routine of class schedules. All student and test maintenance data (e.g., numerically coded answer keys) are delivered to developer/demonstrator consultants by the facilitator for scoring and processing.

Activity 8: Scan, Score, and Process Student Performance Data

All student data is scanned, scored and processed at the developer/demonstrator facility. Computer printouts are produced and returned to the school district within ten school days of delivery. (See Appendix C for examples of Processing Reports.)

COMPONENTS 7-11: PROGRAM PLANNING

Components 7 and 11 directly address instructional and programmatic concerns of teachers and campus administrators. The performance of individual students on objectives tested is displayed on an individual student record. The performance of all students under the direction of a particular teacher or in a particular class is presented, by objective, on a classroom summary sheet. At a glance, the teacher can determine which students mastered a given objective and which students did not master the objective. The criterion set for mastery of an objective is correctly answering three of four questions (75%) relative to a certain objective. A campus summary reflecting student performance data on a given test is produced for use by the principal.

Components 8, 9, and 10 are based on an aggregate of student performance data across all grade levels and inclusive of all campuses. Reports produced for the top loop on the model provide administrators with a basis for analyzing students needs, undertaking deliberate efforts to determine factors which may be contributing to such needs, and developing alternatives for responding to contributory factors which are determined to be related to student needs.

By using the following three activities prescribed by developed/demonstrator consultants, school personnel can accomplish evaluation-specific program planning.

Activity 1: Analyze Strengths and Weaknesses of the Instructional Program

Using computer printouts produced by the Learner-Based Accountability System processing program, local administrators and/or the facilitator in conjunction with developer/demonstrator consultants analyze the strengths and weaknesses of the instructional program. Learner needs are identified and placed in priority order based on student performance. Priority learner needs are analyzed to identify institutional factors with a potential cause/effect relationship. Data reduction forms are used to manipulate student performance data to yield the desired analyses mentioned above.

Activity 2: Prioritize Needs To Be Addressed By Administrative Management Plan

Priority learner needs and/or institutional factors with possible cause/effect relationships are addressed by actions directed toward improvement. Actions typically take the form of staff development, program changes, scheduling alterations, and/or allocation or reallocation of both human and material resources. The goal of each participating district is to examine as many of the institutional factors possibly causing

learner needs within a given time and with available resources. After identifying and ranking instructional and institutional factors, districts prepare action plans designed to remediate instructional and/or programmatic problems.

Activity 5: Reduce to Writing a District Management Plan

The management plan consists of the following components:

(1) a staff development program specifically addressing grade-level deficiencies identified by criterion-referenced tests.

(2) assigned responsibilities for implementing all renewal plans.

(3) an evaluation design to determine if renewal actions were successful in reducing learner needs.

SUMMARY AND DISCUSSION

This paper presented a recently developed model of school evaluation and program development in place in 174 districts in the state of Texas.

Eleven components detailed in the paper described how the system incorporates the implementation, management, and utilization of specified curriculum and school evaluation to provide methods for translating data into practical classroom applications as well as policy-making tools.

Data captured from over 150,000 students impacted by the system have indicated that the focus provided through curriculum orchestration, evaluative feedback, and need-specific intervention favorably affected teachers' use of the curriculum and local district program planning.

With the large number of schools already participating in the Learner-Based Accountability System, the authors believe that an awareness of the project and its impact in the schools can add to the knowledge base for effective program planning and evaluation practices. Moreover, the model has the potential to direct future lines of inquiry into school evaluation and program development by stimulating interest in the replication, embellishment, and/or refinement of such improvement-oriented systems.

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APPENDICES

APPENDIX A

EXAMPLES OF IMPLEMENTATION TASKS LISTS/TIMELINES

GLOBAL TIME FRAME
For Installing The
LEARNER-BASED ACCOUNTABILITY SYSTEM

PREPARING TO CAPTURE STUDENT PERFORMANCE DATA

PHASE	TIME FRAME
I. Specifying Curriculum	September 1981 - October 30, 1981
II. Developing Criterion-Referenced Tests	November 1981 - January 1982
III. Implementing Student Assessment Program	April 1982 - May 1982

UTILIZING STUDENT PERFORMANCE DATA

IV. Interpreting Student Performance Data	June 1982 - August 1982
V. Addressing Learner Institutional Needs	August 1982 - ?

LBAS IMPLEMENTATION TASK LIST

		Timeline
PHASE I:	SPECIFYING CURRICULUM	
	. Receive Facilitator training at ESC	Sept 15 - MA Sept 16 - LA
	. Select local committees to customize master bank	
	. Customize master bank long and short objectives K-12	
	. Return to ESC for computerizing	October 30
	. Proof computer printout of district bank of objectives K-12	November 16
PHASE II:	DEVELOPING CRITERION-REFERENCED TESTS	
	. Receive Facilitator training at ESC	Nov 4,11, 12, or 17
	. Customize master bank test items	
	. Organize grade level test booklets for K-12	
	. Create district bank test file	
	. Return to ESC for computerizing	March 2, 1982
	. Proof computer printout of District Bank Test File K-12	
PHASE III:	IMPLEMENTING STUDENT ASSESSMENT PROGRAM	
	. Receive Facilitator training at ESC	March 24 or 31, 1982
	. Organize local test administration activities	
	. Train personnel in local test	April 19 - May 17, 1982
	. Administer LBAS Test	
	. Validate answer-sheet-packaging-process	
	. Return student performance data to ESC for scanning, scoring, and processing	April 19 - May 7, 1982
PHASE IV:	INTERPRETING STUDENT PERFORMANCE DATA	
	. Receive Facilitator/Administrator training at ESC	June 1982
	. Track performance deficiencies from Program Goals through Enabling Objectives	
	. Prioritize indicated deficiencies	
	. Formulate District Management Plan addressing priority learner needs	July 1982
PHASE V:	ADDRESSING LEARNER/INSTITUTIONAL NEEDS	
	. Implement Phase I of District Management Plan	Aug 1982 - June 1983
	. Plan Staff Development	
	. Initiate Staff Development	

APPENDIX B

EXAMPLES OF OBJECTIVES BANKING

02 MATHEMATICS

02.01 DEVELOP AN UNDERSTANDING OF THE NUMBER SYSTEM AND ITS DEVELOPMENT

02.01.01 EXHIBIT AN UNDERSTANDING OF WHOLE NUMBERS AND NUMBER THEORY

GRADE 00

02.01.01.00.01 GIVEN SEVERAL NUMERALS, THE STUDENT WILL IDENTIFY THE ONE THAT REPRESENTS A SPECIFIED NUMBER FROM ONE THROUGH TEN.

02.01.01.00.02 GIVEN A PICTURE WITH NO MORE THAN TEN OBJECTS, THE STUDEN WILL IDENTIFY THE NUMBER OF OBJECTS.

02.01.01.00.03 GIVEN FOUR PICTURES, EACH CONTAINING NO MORE THAN 10 OBJECTS, THE STUDENT WILL IDENTIFY THE PICTURE WITH THE "MOST" OR "FEWEST" OBJECTS.

02.01.01.00.04 GIVEN A SEQUENCE OF CONSECUTIVE COUNTING NUMBERS NO GREAT THAN 10, WITH ONE NUMBER MISSING, THE STUDENT WILL IDENTI THE MISSING NUMBER.

02.01.01.00.05 GIVEN SEVERAL NUMBERS NO GREATER THAN 10, THE STUDENT WIL IDENTIFY THE ONE THAT IS "JUST BEFORE" OR "JUST AFTER" A SPECIFIED NUMBER.

GRADE 01

02.01.01.01.01 GIVEN SEVERAL NUMERALS, THE STUDENT WILL IDENTIFY THE ONE THAT REPRESENTS A SPECIFIED NUMBER BETWEEN 10 AND 100.

02.01.01.01.02 GIVEN A PICTURE CONTAINING BETWEEN 10 AND 100 OBJECTS, WI GROUPS OF 10 BUNDLED, THE STUDENT WILL IDENTIFY THE NUMBE OF OBJECTS.

02.01.01.01.03 GIVEN SEVERAL NUMERALS BETWEEN 10 AND 100, THE STUDENT WI IDENTIFY THE ONE REPRESENTING THE LARGEST OR SMALLEST NUM AS SPECIFIED.

02.01.01.01.04 GIVEN A SEQUENCE OF CONSECUTIVE COUNTING NUMBERS BETWEEN AND 100, THE STUDENT WILL IDENTIFY THE NEXT NUMBER IN THE SEQUENCE.

02.01.01.01.05 GIVEN A SEQUENCE OF CONSECUTIVE MULTIPLES OF FIVE OR CONSECUTIVE MULTIPLES OF TEN LESS THAN 90, WITH ONE NUMBER MISSING, THE STUDENT WILL IDENTIFY THE MISSING NUMBER.

02.01.01.01.06 GIVEN A PICTURE OF FIVE OBJECTS IN A ROW, THE STUDENT WILL IDENTIFY THE FIRST, SECOND, THIRD, FOURTH, OR FIFTH OBJECT AS SPECIFIED.

02.01.01.01.07 GIVEN SEVERAL NUMBERS NO GREATER THAN 100, THE STUDENT WILL IDENTIFY THE ONE THAT IS "JUST BEFORE" OR "JUST AFTER" A SPECIFIED NUMBER.

GRADE 02

02.01.01.02.01 GIVEN SEVERAL NUMERALS, THE STUDENT WILL IDENTIFY THE ONE THAT REPRESENTS A SPECIFIED NUMBER BETEEN 100 AND 1,000.

02.01.01.02.02 GIVEN SEVERAL NUMERALS BETWEEN 100 AND 1,000, THE STUDENT WILL IDENTIFY THE ONE THAT IS EITHER "GREATER THAN" OR "LESS THAN" A SPECIFIED NUMBER.

02.01.01.02.03 GIVEN A SEQUENCE OF CONSECUTIVE COUNTING NUMBERS BETWEEN 1 AND 1,000, THE STUDENT WILL IDENTIFY THE NEXT NUMBER IN THE SEQUENCE.

02.01.01.02.04 GIVEN A SEQUENCE OF CONSECUTIVE MULTIPLES OF TWO, EACH LESS THAN 1,000, WITH ONE NUMBER MISSING, THE STUDENT WILL IDENTIFY THE MISSING NUMBER.

02.01.01.02.05 GIVEN A PICTURE OF TEN OBJECTS IN A ROW, THE STUDENT WILL IDENTIFY THE SIXTH, SEVENTH, EIGHTH, NINTH, OR TENTH OBJECT AS SPECIFIED.

02.01.01.02.06 GIVEN THREE-DIGIT NUMERAL, THE STUDENT WILL IDENTIFY THE INDICATED NUMBER OF ONES, TENS, OR HUNDREDS AS SPECIFIED.

02.01.01.02.07 GIVEN SEVERAL NUMBERS LESS THAN 100, THE STUDENT WILL IDENTIFY THE ONE THAT IS ODD OR EVEN AS SPECIFIED.

02.01.01.02.08 GIVEN SEVERAL NUMBERS LESS THAN 1,000, THE STUDENT WILL IDENTIFY THE ONE THAT IS "ONE MORE THAN" OR "ONE LESS THAN" A SPECIFIED NUMBER.

GRADE 03

02.01.01.03.01 GIVEN SEVERAL NUMERALS, THE STUDENT WILL IDENTIFY THE ONE THAT REPRESENTS A SPECIFIED NUMBER BETWEEN 1,000 AND 10,00

02.01.01.03.02 GIVEN SEVERAL NUMERALS BETWEEN 1,000 AND 10,000, THE STUDE WILL IDENTIFY THE ONE THAT IS "GREATER THAN" OR "LESS THAN" A SPECIFIED NUMBER.

02.01.01.03.03 GIVEN A SEQUENCE OF CONSECUTIVE COUNTING NUMBERS BETWEEN 1,000 AND 10,000, THE STUDENT WILL IDENTIFY THE NEXT NUMBER IN THE SEQUENCE.

02.01.01.03.04 GIVEN A SEQUENCE OF CONSECUTIVE ODD NUMBERS, WITH ONE NUMBE MISSING, THE STUDENT WILL IDENTIFY THE MISSING NUMBER.

02.01.01.03.05 GIVEN A FOUR-DIGIT NUMERAL, THE STUDENT WILL IDENTIFY THE INDICATED NUMBER OF ONES, TENS, HUNDREDS, OR THOUSANDS AS SPECIFIED.

02.01.01.03.06 GIVEN TWO CONSECUTIVE ODD OR EVEN NUMBERS, THE STUDENT WILL IDENTIFY THE NUMBER THAT IS BETWEEN THE GIVEN NUMBERS.

GRADE 04

02.01.01.04.01 GIVEN SEVERAL NUMERALS, THE STUDENT WILL IDENTIFY THE ONE THAT REPRESENTS A SPECIFIED NUMBER BETWEEN 10,000 AND 100,000.

02.01.01.04.02 GIVEN A FIVE-DIGIT NUMERAL, THE STUDENT WILL IDENTIFY THE DIGIT THAT IS IN A SPECIFIED PLACE.

02.01.01.04.03 GIVEN SEVERAL NUMBERS BETWEEN 10,000 AND 100,000, THE STUDENT WILL IDENTIFY THE ONE THAT IS "GREATER THAN" OR "LESS THAN" A SPECIFIED NUMBER.

02.01.01.04.04 GIVEN A SEQUENCE OF CONSECUTIVE COUNTING NUMBERS BETWEEN 10,000 AND 100,000, THE STUDENT WILL IDENTIFY THE NEXT NUMBER IN THE SEQUENCE.

02.01.01.04.05 GIVEN A SEQUENCE OF NUMBERS FORMED BY ADDITION OF A NUMBER UP TO 5, THE STUDENT WILL IDENTIFY THE NEXT NUMBER IN THE SEQUENCE.

02.01.01.04.06 GIVEN A ROMAN NUMERAL LESS THAN 40, THE STUDENT WILL IDENTIFY ITS ARABIC EQUIVALENT.

GRADE 05

02.01.01.05.01 GIVEN SEVERAL NUMERALS, THE STUDENT WILL IDENTIFY THE ONE THAT REPRESENTS A SPECIFIED NUMBER BETWEEN 100,000 AND 1,000,000.

02.01.01.05.02 GIVEN A SIX-DIGIT NUMERAL, THE STUDENT WILL IDENTIFY THE DIGIT THAT IS IN A SPECIFIED PLACE.

02.01.01.05.03 GIVEN SEVERAL NUMBERS BETWEEN 100,000 AND 1,000,000, THE STUDENT WILL IDENTIFY THE ONE THAT IS "GREATER THAN" OR "LESS THAN" A SPECIFIED NUMBER.

02.01.01.05.04 GIVEN A SEQUENCE OF NUMBERS FORMED BY ADDITION OR SUBTRACTION OF A NUMBER UP TO 5, THE STUDENT WILL IDENTIFY THE NEXT NUMBER IN THE SEQUENCE.

02.01.01.05.05 GIVEN A ROMAN NUMERAL LESS THAN 400, THE STUDENT WILL IDENTIFY ITS ARABIC EQUIVALENT.

02.01.01.05.06 GIVEN A FOUR-DIGIT NUMBER, THE STUDENT WILL ROUND THE NUMBER OFF AS SPECIFIED.

GRADE 06

02.01.01.06.01 GIVEN SEVERAL NUMERALS, THE STUDENT WILL IDENTIFY THE ONE THAT REPRESENTS A SPECIFIED NUMBER BETWEEN 1,000,000 AND 1,000,000,000.

02.01.01.06.02 GIVEN A NINE-DIGIT NUMERAL, THE STUDENT WILL IDENTIFY THE DIGIT THAT IS IN A SPECIFIED PLACE.

02.01.01.06.03 GIVEN A SEQUENCE OF NUMBERS FORMED BY ADDING OR SUBTRACTING A NUMBER UP TO 10, THE STUDENT WILL IDENTIFY THE NEXT NUMBER IN THE SEQUENCE.

02.01.01.06.04 GIVEN A ROMAN NUMERAL UP TO 1,000, THE STUDENT WILL IDENTIFY ITS ARABIC EQUIVALENT.

02.01.01.06.05 GIVEN A SEVEN-DIGIT NUMBER, THE STUDENT WILL ROUND THE NUMBER OFF AS SPECIFIED.

02.01.01.06.06 GIVEN SEVERAL NUMBERS, THE STUDENT WILL IDENTIFY THE ONE THAT IS A FACTOR OF A SPECIFIED NUMBER LESS THAN 25.

02.01.01.06.07 GIVEN TWO NUMBERS LESS THAN 25, THE STUDENT WILL IDENTIFY THE GREATEST COMMON FACTOR.

02.01.01.06.08 GIVEN SEVERAL NUMBERS, THE STUDENT WILL IDENTIFY THE ONE THAT IS A MULTIPLE OF A SPECIFIED NUMBER LESS THAN 25.

02.01.01.06.09 GIVEN TWO NUMBERS LESS THAN 25, THE STUDENT WILL IDENTIFY THE LEAST COMMON MULTIPLE.

02.01.01.06.10 GIVEN SEVERAL NUMBERS LESS THAN 25, THE STUDENT WILL IDENTIFY THE ONE THAT IS PRIME OR COMPOSITE AS SPECIFIED.

02.01.01.06.11 GIVEN A PRODUCT OF SEVERAL FACTORS, THE STUDENT WILL REWRITE THE PRODUCT USING EXPONENTS.

02.01.01.06.12 GIVEN A NUMBER LESS THAN 25, THE STUDENT WILL WRITE THE NUMBER AS A PRODUCT OF ITS PRIME FACTORS USING EXPONENTS.

02.01.01.06.13 GIVEN A NUMBER WITH AS MANY AS 7 PLACES WHICH IS A POWER OF 10, THE STUDENT WILL WRITE THE NUMBER AS A POWER OF 10.

GRADE 07

02.01.01.07.01 GIVEN A SEQUENCE OF NUMBERS FORMED BY ADDITION OR MULTIPLICATION, THE STUDENT WILL IDENTIFY THE NEXT NUMBER IN THE SEQUENCE.

02.01.01.07.02 GIVEN SEVERAL NUMBERS, THE STUDENT WILL IDENTIFY THE ONE THAT IS A FACTOR OF A SPECIFIED NUMBER LESS THAN 61.

02.01.01.07.03 GIVEN TWO NUMBERS LESS THAN 61, THE STUDENT WILL IDENTIFY THE GREATEST COMMON FACTOR.

02.01.01.07.04 GIVEN SEVERAL NUMBERS, THE STUDENT WILL IDENTIFY THE ONE THAT IS A MULTIPLE OF A SPECIFIED NUMBER LESS THAN 61.

02.01.01.07.05 GIVEN TWO NUMBERS LESS THAN 61, THE STUDENT WILL IDENTIFY THE LEAST COMMON MULTIPLE.

02.01.01.07.06 GIVEN SEVERAL NUMBERS LESS THAN 100, THE STUDENT WILL IDENTIFY THE ONE THAT IS PRIME OR COMPOSITE AS SPECIFIED.

02.01.01.07.07 GIVEN A ONE DIGIT BASE AND AN EXPONENT LESS THAN 8, THE STUDENT WILL IDENTIFY THE EQUIVALENT WHOLE NUMBER.

02.01.01.07.08 GIVEN A NUMBER LESS THAN 61, THE STUDENT WILL WRITE THE NUMBER AS A PRODUCT OF ITS PRIME FACTORS USING EXPONENTS.

02.01.01.07.09 GIVEN A PERFECT SQUARE LESS THAN 145, THE STUDENT WILL IDENTIFY THE SQUARE ROOT.

GRADE 08

02.01.01.08.01 GIVEN A SEQUENCE OF WHOLE NUMBERS FORMED BY ADDITION, SUBTRACTION, MULTIPLICATION, OR DIVISION, THE STUDENT WILL IDENTIFY THE NEXT NUMBER IN THE SEQUENCE.

02.01.01.08.02 GIVEN TWO NUMBERS LESS THAN 101, THE STUDENT WILL IDENTIFY THE GREATEST COMMON FACTOR.

02.01.01.08.03 GIVEN TWO NUMBERS LESS THAN 101, THE STUDENT WILL IDENTIFY THE LEAST COMMON MULTIPLE.

02.01.01.08.04 GIVEN A NUMBER LESS THAN 101, THE STUDENT WILL WRITE THE NUMBER AS A PRODUCT OF ITS PRIME FACTORS USING EXPONENTS.

02.01.01.08.05 GIVEN A BASE TWO OR EIGHT NUMERAL, THE STUDENT WILL IDENTIFY THE EQUIVALENT BASE TEN NUMERAL, OR CONVERSELY.

GRADE 00

02 MATHEMATICS

'G 02.01 DEVELOP AN UNDERSTANDING OF THE NUMBER SYSTEM AND ITS DEVELOPMENT

TPO 02.01.01 EXHIBIT AN UNDERSTANDING OF WHOLE NUMBERS AND NUMBER THEORY

EO 02.01.01.00.01 GIVEN SEVERAL NUMERALS, THE STUDENT WILL IDENTIFY THE ONE THAT REPRESENTS A SPECIFIED NUMBER FROM ONE THROUGH TEN.

EO 02.01.01.00.02 GIVEN A PICTURE WITH NO MORE THAN TEN OBJECTS, THE STUDENT WILL IDENTIFY THE NUMBER OF OBJECTS.

EO 02.01.01.00.03 GIVEN FOUR PICTURES, EACH CONTAINING NO MORE THAN 10 OBJECTS, THE STUDENT WILL IDENTIFY THE PICTURE WITH THE "MOST" OR "FEWEST" OBJECTS.

EO 02.01.01.00.04 GIVEN A SEQUENCE OF CONSECUTIVE COUNTING NUMBERS NO GREATER THAN 10, WITH ONE NUMBER MISSING, THE STUDENT WILL IDENTIFY THE MISSING NUMBER.

EO 02.01.01.00.05 GIVEN SEVERAL NUMBERS NO GREATER THAN 10, THE STUDENT WILL IDENTIFY THE ONE THAT IS "JUST BEFORE" OR "JUST AFTER" A SPECIFIED NUMBER.

'G 02.02 DEVELOP AN UNDERSTANDING OF GEOMETRIC FIGURES AND THEIR PROPERTIES

TPO 02.02.01 EXHIBIT THE ABILITY TO RECOGNIZE AND CONSTRUCT BASIC GEOMETRIC FIGURES AND EXHIBIT AN UNDERSTANDING OF THEIR PROPERTIES.

EO 02.02.01.00.01 GIVEN SEVERAL CIRCLES, EACH HAVING AN OBJECT EITHER INSIDE, OUTSIDE, OR ON THE CIRCLE, THE STUDENT WILL IDENTIFY THE CIRCLE WITH THE OBJECT IN THE SPECIFIED LOCATION.

EO 02.02.01.00.02 GIVEN A GEOMETRIC FIGURE, THE FIRST OF WHICH IS A CIRCLE, RECTANGLE, OR SQUARE, THE STUDENT WILL IDENTIFY THE OTHER FIGURE HAVING "THE SAME SHAPE AS" THE FIRST.

EO 02.02.01.00.03 GIVEN SEVERAL GEOMETRIC FIGURES, THE STUDENT WILL IDENTIFY THE ONE THAT IS A CIRCLE, RECTANGLE, OR SQUARE AS SPECIFIED.

'G 02.08 DEVELOP AN UNDERSTANDING OF AMERICAN AND METRIC SYSTEMS OF MEASUREMENT

TPO 02.08.02 EXHIBIT AN UNDERSTANDING OF TIME AND TEMPERATURE

EO 02.08.02.00.01 GIVEN A PICTURE OF SEVERAL INSTRUMENTS OF MEASURE, THE STUDENT WILL IDENTIFY THE ONE THAT IS A CLOCK, CALENDAR, OR THERMOMETER, OR THE ONE THAT IS USED TO MEASURE TIME, TEMPERATURE, OR DAY OF THE MONTH AS SPECIFIED.

GRADE 01

02 MATHEMATICS

'G 02.01 DEVELOP AN UNDERSTANDING OF THE NUMBER SYSTEM AND ITS DEVELOPMENT

TPO 02.01.01 EXHIBIT AN UNDERSTANDING OF WHOLE NUMBERS AND NUMBER THEORY

EO 02.01.01.01.01 GIVEN SEVERAL NUMERALS, THE STUDENT WILL IDENTIFY THE ONE THAT REPRESENTS A SPECIFIED NUMBER BETWEEN 10 AND 100.

EO 02.01.01.01.02 GIVEN A PICTURE CONTAINING BETWEEN 10 AND 100 OBJECTS, WITH GROUPS OF 10 BUNDLED, THE STUDENT WILL IDENTIFY THE NUMBER OF OBJECTS.

EO 02.01.01.01.03 GIVEN SEVERAL NUMERALS BETWEEN 10 AND 100, THE STUDENT WILL IDENTIFY THE ONE REPRESENTING THE LARGEST OR SMALLEST NUMBER AS SPECIFIED.

EO 02.01.01.01.04 GIVEN A SEQUENCE OF CONSECUTIVE COUNTING NUMBERS BETWEEN 10 AND 100, THE STUDENT WILL IDENTIFY THE NEXT NUMBER IN THE SEQUENCE.

EO 02.01.01.01.05 GIVEN A SEQUENCE OF CONSECUTIVE MULTIPLES OF FIVE OR CONSECUTIVE MULTIPLES OF TEN LESS THAN 90, WITH ONE NUMBER MISSING, THE STUDENT WILL IDENTIFY THE MISSING NUMBER.

EO 02.01.01.01.06 GIVEN A PICTURE OF FIVE OBJECTS IN A ROW, THE STUDENT WILL IDENTIFY THE FIRST, SECOND, THIRD, FOURTH, OR FIFTH OBJECT AS SPECIFIED.

EO 02.01.01.01.07 GIVEN SEVERAL NUMBERS NO GREATER THAN 100, THE STUDENT WILL IDENTIFY THE ONE THAT IS "JUST BEFORE" OR "JUST AFTER" A SPECIFIED NUMBER.

02.02 DEVELOP AN UNDERSTANDING OF GEOMETRIC FIGURES AND THEIR PROPERTIES

TPO 02.02.01 EXHIBIT THE ABILITY TO RECOGNIZE AND CONSTRUCT BASIC GEOMETRIC FIGURES AND EXHIBIT AN UNDERSTANDING OF THEIR PROPERTIES.

EO 02.02.01.01.01 GIVEN A GEOMETRIC FIGURE FOLLOWED BY SEVERAL OTHER FIGURES, THE STUDENT WILL IDENTIFY THE FIGURE HAVING "THE SAME SHAPE AS" THE FIRST FIGURE.

EO 02.02.01.01.02 GIVEN SEVERAL GEOMETRIC FIGURES, THE STUDENT WILL IDENTIFY THE ONE THAT IS A CIRCLE, RECTANGLE, SQUARE, OR TRIANGLE AS SPECIFIED.

'G 02.03 DEVELOP THE ABILITY TO PERFORM BASIC MATH OPERATIONS ON WHOLE NUMBERS

TPO 02.03.01 EXHIBIT THE ABILITY TO ADD WHOLE NUMBERS

EO 02.03.01.01.01 GIVEN TWO ONE-DIGIT NUMBERS, VERTICALLY OR HORIZONTALLY, WHOSE SUM IS TEN OR LESS, THE STUDENT WILL IDENTIFY THE SUM.

EO 02.03.01.01.02 GIVEN THREE ONE-DIGIT NUMBERS, VERTICALLY OR HORIZONTALLY, WHOSE SUM IS TEN OR LESS, THE STUDENT WILL IDENTIFY THE SUM.

TPO 02.03.02 EXHIBIT THE ABILITY TO SUBTRACT WHOLE NUMBERS

EO 02.03.02.01.01 GIVEN TWO ONE-DIGIT NUMBERS, VERTICALLY OR HORIZONTALLY, THE STUDENT WILL IDENTIFY THE DIFFERENCE.

'G 02.08 DEVELOP AN UNDERSTANDING OF AMERICAN AND METRIC SYSTEMS OF MEASUREMENT

TPO 02.08.01 EXHIBIT AN UNDERSTANDING OF THE MONEY SYSTEM

EO 02.08.01.01.01 GIVEN THE PICTURE OF SEVERAL COINS, THE STUDENT WILL IDENTIFY THE ONE THAT IS A PENNY, NICKLE, DIME, OR QUARTER AS SPECIFIED.

TPO 02.08.02 EXHIBIT AN UNDERSTANDING OF TIME AND TEMPERATURE

EO 02.08.02.01.01 GIVEN SEVERAL PICTURES OF CLOCKS, EACH WITH THE MINUTE HAND POINTING TO 12, THE STUDENT WILL IDENTIFY THE CLOCK SHOWING A SPECIFIED TIME.

TPO 02.08.03 EXHIBIT AN UNDERSTANDING OF LENGTH, VOLUME, AND WEIGHT

EO 02.08.03.01.01 GIVEN SEVERAL OBJECTS, THE STUDENT WILL IDENTIFY THE LONGEST OR SHORTEST AS SPECIFIED.

EO 02.08.03.01.02 GIVEN SEVERAL BOXES WITH PROPORTIONAL DIMENSIONS, THE STUDENT WILL IDENTIFY THE LARGEST OR SMALLEST AS SPECIFIED.

'G 02.09 DEVELOP THE ABILITY TO APPLY MATHEMATICAL SKILLS AND CONCEPTS IN SOLVING PROBLEMS

TPO 02.09.01 EXHIBIT THE ABILITY TO SOLVE WORD PROBLEMS

EO 02.09.01.01.01 GIVEN A PICTURE OF LESS THAN 10 OBJECTS, THE STUDENT WILL RECOGNIZE THE ADDITION FACT WHICH DESCRIBES THE PICTURE.

TPO 02.09.02 EXHIBIT THE ABILITY TO SOLVE OPEN SENTENCES

EO 02.09.02.01.01 GIVEN SEVERAL MATHEMATICAL SYMBOLS, THE STUDENT WILL IDENTIFY THE SYMBOL FOR "PLUS", "ADDITION", "MINUS", "SUBTRACTION", OR "EQUALS" AS SPECIFIED.

APPENDIX C

EXAMPLES OF PROCESSING REPORTS

STUDENT REPOR

STUDENT Betty Doe
TEACHER Wayne King
CAMPUS Dowling
DISTRICT Jacobs ISD
CITY Jacobs
STATE Tx
TEST DATE 11/78
TEST BOOK 0002
GRADE 02
CURRICULUM MATHEMATICS

OBJECTIVES:
MASTERED 26 OBJECTIVES
OF 47 FOR 55%

LEARNER BASED ACCOUNTABILITY SYSTEM

CA.PG.TO.GL.EO	OBJECTIVE DESCRIPTION	QUESTION 1234	CORRECT MASTERY	TOTAL
2.01.01.02.01	NUMBER WORD NAMES 100-999 REPLACED WITH NUMERALS	++++		0 4
2.01.01.02.02	ORDER OF NUMBERS 10-1000	++++	M	4 4
2.01.01.02.03	CRDINAL NUMBERS FIRST THROUGH TWELFTH	++++	M	4 4
2.01.01.02.04	FRACTIONAL PTS. ONE THIRD ONE SIXTH ONE EIGHTH	-+--		1 4
2.01.01.02.05	IDENTIFY PARTS OF WHOLE	+++-		3 4
2.01.01.02.06	LOCATE EQUIVALENT PTS. OF THE WHOLE-THIRDS SIXTHS	++++	M	4 4
2.01.01.02.07	FRACTIONAL PARTS IDENTIFIED BY NAMES	++++	M	4 4
2.01.01.02.08	RENAMING SUMS	--++		2 4
2.01.01.02.09	GREATER THAN-LESS THAN USING NUMBER COMPARISONS	+++-	M	3 4
2.01.01.02.10	RENAME NUMERALS 0-18	+--+		2 4
2.01.01.02.11	RENAME 2-DIGIT NUMBERS	----		0 4
2.01.01.02.13	CARDINALITY TO 100	++++	M	4 4
2.01.01.02.14	CARDINALITY TO 1000	----		0 4
2.01.01.02.15	JOINING SETS 6 TO 10	----		0 4
2.01.02.02.01	EQUAL OR NOT EQUAL TO	----		0 4
2.01.02.02.02	SUMS AND DIFFERENCES USING > < =	--+-		1 4
2.01.02.02.03	NUMBER SENTENCES USING > < = NOT #	----		0 4
2.01.03.02.01	PLACE VALUE THROUGH 3 PLACES	----		0 4
2.02.01.02.01	ADD TWO 1-DIGIT NUMBERS SUMS TO 20	++++	M	4 4
2.02.01.02.02	ADD THREE 1-DIGIT NUMBERS SUMS TO 20	++++	M	4 4
2.02.01.02.03	ADD TWO 2-DIGIT NUMBERS WITHOUT REGROUPING	++++	M	4 4
2.02.01.02.04	ADD THREE OR FOUR WHOLE NUMBERS-SUMS 99 OR LESS	++++	M	4 4
2.02.01.02.05	ADD TWO 3-DIGIT NUMBERS WITHOUT REGROUPING	+-++	M	3 4
2.02.01.02.07	SUBTRACT TWO 2-DIGIT NUMBERS	++++	M	4 4
2.02.01.02.08	SUBTRACT TWO 3-DIGIT NUMBERS FROM 3-DIGITS	++++	M	4 4
2.02.01.02.11	ADD TEN AND A 1-DIGIT NUMBER	++++	M	4 4
2.02.01.02.12	ADD 1-DIGIT TO 2-DIGITS-99 OR LESS	++++	M	4 4
2.02.01.02.14	ADD FOUR 1-DIGIT NUMBERS SUMS 11-20	+++-	M	3 4
2.02.01.02.15	ADD 1-OR 2-DIGITS TO 2-DIGITS SUMS 20-50 WITH REGRO	+---		1 4
2.02.01.02.16	ADD 1-OR 2-DIGITS TO 2-DIGITS SUMS 51-99 WITH REGR	-+--		1 4
2.02.01.02.17	SUBTRACT 1-DIGIT FROM 10 OR LESS	++++	M	4 4
2.02.01.02.18	SUBTRACT 1-DIGIT FROM 2-DIGITS WITH REGROUPING	-+-+		2 4
2.02.01.02.19	SUBTRACT 1-DIGIT FROM 2-DIGITS HORIZONTALLY	++++	M	4 4
2.02.01.02.20	SUBTRACT 1-2- OR 3-DIGITS FROM 3-DIGITS	++++	M	4 4
2.02.01.02.23	ADDITION PROPERTIES	----		0 4
2.02.02.02.21	NUMBER LINE SUBTRACTION	+---		1 4
2.02.02.02.22	NUMBER LINE ADDITION	---+		1 4
2.03.01.02.01	ONE-STEP WORD PROBLEMS	++++	M	4 4
2.03.02.02.01	COIN VALUES 25 CENTS TO ONE DOLLAR	++++	M	4 4
2.03.02.02.03	FIND TOTAL COIN COLLECTION VALUE	----		0 4
2.03.02.02.06	COIN NAMES	-+++	M	3 4
2.04.01.02.01	OPEN CURVES	++++	M	4 4
2.04.03.02.01	CIRCLES SQUARES TRIANGLES RECTANGLES	----		0 4
2.05.03.02.01	TIME TO HALF HOUR	+-++	M	3 4
2.05.03.02.02	THE CALENDAR	+++-	M	3 4
2.05.03.02.04	COMPARISON OF MEASUREMENTS-SPATIAL	----		0 4
2.05.03.02.05	MEASUREMENT TO HALF-INCH	++++	M	4 4

EO TYPE 1

ENABLING OBJECTIVE SYSTEM

CLASS Summary
TEACHER Wayne King
CAMPUS Darling
DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE:
TEST BOOK 0002 * = MASTERED
GRADE 02 - = NOT MASTERED
CURRICULUM MATHEMATICS

TOTAL NUMBER TESTED 15

(A.PG.TO.GL.EO	OBJECTIVE DESCRIPTION	NOT MASTERED NO.	PCT
2.01.01.02.01	NUMBER WORD NAMES 100-999 REPLACED WITH NUMERALS	9	40
2.01.01.02.02	ORDER OF NUMBERS 10-1000	12	20
2.01.01.02.03	ORDINAL NUMBERS FIRST THROUGH TWELFTH	5	66
2.01.01.02.04	FRACTIONAL PTS. ONE THIRD ONE SIXTH ONE EIGHTH	8	46
2.01.01.02.05	IDENTIFY PARTS OF WHOLE	4	73
2.01.01.02.06	LOCATE EQUIVALENT PTS. OF THE WHOLE-THIRDS SIXTHS	2	86
2.01.01.02.07	FRACTIONAL PARTS IDENTIFIED BY NAMES	2	86
2.01.01.02.08	NAMING SUMS	10	33
2.01.01.02.09	GREATER THAN-LESS THAN USING NUMBER COMPARISONS	11	26
2.01.01.02.10	RENAME NUMERALS 0-10	13	13
2.01.01.02.11	RENAME 2-DIGIT NUMBERS	12	20
2.01.01.02.13	CARDINALITY TO 100	10	33
2.01.01.02.14	CARDINALITY TO 1000	12	20
2.01.01.02.15	JOINING SETS 6 TO 10	8	46
2.01.02.02.01	EQUAL OR NOT EQUAL TO	15	0
2.01.02.02.02	SUMS AND DIFFERENCES USING > < =	15	0
2.01.02.02.03	NUMBER SENTENCES USING > < OR =	15	0
2.01.03.02.01	PLACE VALUE THROUGH 3 PLACES	14	6
2.02.01.02.01	ADD TWO 1-DIGIT NUMBERS SUMS TO 20	1	93
2.02.01.02.02	ADD THREE 1-DIGIT NUMBERS SUMS TO 20	3	80
2.02.01.02.03	ADD TWO 2-DIGIT NUMBERS WITHOUT REGROUPING	10	33

DOE, JANE | WASHINGTON, GEORGE | LINCOLN, ABRAHAM | TAYLOR, ZACHARY | POLK, JAMES K. | GREENE, NATHANIEL | BELL, ALEXANDER GRAHAM | TESLA, NIKOLA | LAURENCE, ROLL | RICHARDS, CAVEMAN | KANDARIAN, ARAM | BARBARONY, JAN

FOR THIS CLASS

EO TYPE 2

ENABLING OBJECTIVE SYSTEM
CAMPUS SUMMARY

CAMPUS Dowling
DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE:
TEST BOOK 0002 PERCENT MASTERING
GRADE 02
CURRICULUM MATHEMATICS

FOR THIS CAMPUS

CA.PG.TO.GL.EO	OBJECTIVE DESCRIPTION	KINDERGARTEN	1ST GRADE	2ND GRADE	3RD GRADE	4TH GRADE	TOTAL
		###	###	###	###	###	###
2.01.01.02.01	NUMBER WORD NAMES 100-999 REPLACED WITH NUMERALS	40	77	57	82	83	69
2.01.01.02.02	ORDER OF NUMBERS 10-1000	20	54	52	76	37	48
2.01.01.02.03	ORDINAL NUMBERS FIRST THROUGH TWELFTH	66	86	85	88	83	82
2.01.01.02.04	FRACTIONAL PTS. ONE THIRD ONE SIXTH ONE EIGHTH	46	45	61	35	50	48
2.01.01.02.05	IDENTIFY PARTS OF WHOLE	73	90	80	82	79	81
2.01.01.02.06	LOCATE EQUIVALENT PTS. OF THE WHOLE-THIRDS SIXTHS	86	90	90	100	87	90
2.01.01.02.07	FRACTIONAL PARTS IDENTIFIED BY NAMES	86	95	80	88	91	88
2.01.01.02.08	RENAMING SUMS	33	59	66	52	45	52
2.01.01.02.09	GREATER THAN-LESS THAN USING NUMBER COMPARISONS	26	45	57	64	50	49
2.01.01.02.10	RENAME NUMERALS 0-10	13	22	47	70	37	38
2.01.01.02.11	RENAME 2-DIGIT NUMBERS	20	40	85	64	41	51
2.01.01.02.13	CARDINALITY TO 100	33	54	76	82	58	61
2.01.01.02.14	CARDINALITY TO 1000	20	36	52	47	20	35
2.01.01.02.15	JOINING SETS 6 TO 10	46	59	80	88	58	66
2.01.02.02.01	EQUAL OR NOT EQUAL TO	0	0	19	0	8	6
2.01.02.02.02	SUMS AND DIFFERENCES USING > < =	0	9	14	0	8	7
2.01.02.02.03	NUMBER SENTENCES USING > < = NOT =	0	0	19	0	37	13
2.01.03.02.01	PLACE VALUE THROUGH 3 PLACES	6	13	47	0	41	24
2.02.01.02.01	ADD TWO 1-DIGIT NUMBERS SUMS TO 20	93	90	100	94	95	94
2.02.01.02.02	ADD THREE 1-DIGIT NUMBERS SUMS TO 20	80	90	100	94	95	92
2.02.01.02.03	ADD TWO 2-DIGIT NUMBERS WITHOUT REGROUPING	33	54	66	64	75	60

EO TYPE 3

ENABLING OBJECTIVE SYSTEM
DISTRICT SUMMARY

DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE:
TEST BOOK 0002 PERCENT MASTERING
GRADE 02
CURRICULUM MATHEMATICS

DOWLING DISTRICT TOTALS

FOR THIS DISTRICT

CA.PG.TO.GL.EO	OBJECTIVE DESCRIPTION	xxx	xxx
2.01.01.02.01	NUMBER WORD NAMES 100-999 REPLACED WITH NUMERALS	69	69
2.01.01.02.02	ORDER OF NUMBERS 10-1000	48	48
2.01.01.02.03	ORDINAL NUMBERS FIRST THROUGH TWELFTH	82	82
2.01.01.02.04	FRACTIONAL PTS. ONE THIRD ONE SIXTH ONE EIGHTH	48	48
2.01.01.02.05	IDENTIFY PARTS OF WHOLE	81	81
2.01.01.02.06	LOCATE EQUIVALENT PTS. OF THE WHOLE-THIRDS SIXTHS	90	90
2.01.01.02.07	FRACTIONAL PARTS IDENTIFIED BY NAMES	88	88
2.01.01.02.08	RENAMING SUMS	52	52
2.01.01.02.09	GREATER THAN-LESS THAN USING NUMBER COMPARISONS	49	49
2.01.01.02.10	RENAME NUMERALS 0-18	38	38
2.01.01.02.11	RENAME 2-DIGIT NUMBERS	51	51
2.01.01.02.13	CARDINALITY TO 100	61	61
2.01.01.02.14	CARDINALITY TO 1000	35	35
2.01.01.02.15	JOINING SETS 6 TO 10	66	66
2.01.02.02.01	EQUAL OR NOT EQUAL TO	6	6
2.01.02.02.02	SUMS AND DIFFERENCES USING > < =	7	7
2.01.02.02.03	NUMBER SENTENCES USING > < NOT =	13	13
2.01.03.02.01	PLACE VALUE THROUGH 3 PLACES	24	24
2.02.01.02.01	ADD TWO 1-DIGIT NUMBERS SUMS TO 20	94	94
2.02.01.02.02	ADD THREE 1-DIGIT NUMBERS SUMS TO 20	92	92
2.02.01.02.03	ADD TWO 2-DIGIT NUMBERS WITHOUT REGROUPING	60	60

EO TYPE 4

Form 2021

LEARNER BASED ACCOUNTABILITY SYSTEM Region 10 EDUCATION SERVICE CENTER, P.O. Box 1300 Richardson, TX 75080

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006233

TERMINAL PERFORMANCE OBJECTIVES SYSTEM
CAMPUS SUMMARY FOR A GRADE BY TEACHER

PAGE 1 OF 1

FOR THIS GRADE

CAMPUS Dowling
DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE: PERCENT EFFECTIVE

GRADE 02
CURRICULUM MATHEMATICS

CR.PG.TO	OBJECTIVE DESCRIPTION	KINDERGARTEN	SIGHT WORDS	GIDEON	HIGHLAND	SCHOOL AVERAGE
		*** 52	*** 68	*** 74	*** 75	*** 65	*** 67
2.01.01	UNDERSTANDING OF NUMERATION SYSTEM	3	10	34	11	30	19
2.01.02	IDENTIFICATION OF TERMS AND SYMBOLS	23	27	60	28	52	40
2.01.03	UNDERSTANDING OF PLACE VALUE	52	69	80	70	69	69
2.02.01	SKILL IN ADDITION AND SUBTRACTION	13	20	58	40	44	36
2.02.02	SKILL IN MULTIPLICATION AND DIVISION	90	94	74	81	84	85
2.03.01	ABILITY TO SOLVE NUMBER AND WORD PROBLEMS	53	70	79	83	67	71
2.03.02	SKILLS INVOLVED IN HANDLING MONEY	62	75	88	78	89	80
2.04.01	KNOWLEDGE OF GEOMETRIC LANGUAGE AND SYMBOLS	28	41	60	60	41	46
2.04.03	ABILITY TO IDENTIFY 1-2- OR 3-DIMENSIONAL FIGURES	39	37	59	69	48	55
2.05.03	ABILITY TO MEASURE TIME	46	1 41	72	66	62	62
TEACHER TOTAL							

TPO TYPE 1

Form 2021

LEARNER BASED ACCOUNTABILITY SYSTEM Region 10 EDUCATION SERVICE CENTER, P.O. Box 1300 Richardson, TX 75080

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TERMINAL PERFORMANCE OBJECTIVES SYSTEM
CAMPUS SUMMARY BY GRADE

CAMPUS Dowling
DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE: PERCENT EFFECTIVE

FOR THIS CAMPUS

CURRICULUM MATHEMATICS

CA.PG.TO	OBJECTIVE DESCRIPTION	CAMPUS	GRADE TOTAL
2.01.01	UNDERSTANDING OF NUMERATION SYSTEM	xxx 67	xxx 67
2.01.02	IDENTIFICATION OF TERMS AND SYMBOLS	19	19
2.01.03	UNDERSTANDING OF PLACE VALUE	40	40
2.02.01	SKILL IN ADDITION AND SUBTRACTION	69	69
2.02.02	SKILL IN MULTIPLICATION AND DIVISION	36	36
2.03.01	ABILITY TO SOLVE NUMBER AND WORD PROBLEMS	85	85
2.03.02	SKILLS INVOLVED IN HANDLING MONEY	71	71
2.04.01	KNOWLEDGE OF GEOMETRIC LANGUAGE AND SYMBOLS	80	80
2.04.03	ABILITY TO IDENTIFY 1-2- OR 3-DIMENSIONAL FIGURES	46	46
2.05.03	ABILITY TO MEASURE TIME	55	55
GRADE TOTAL		62	62

TPO TYPE 2

TERMINAL PERFORMANCE OBJECTIVES SYSTEM
DISTRICT SUMMARY BY GRADE

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FOR THIS DISTRICT

DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE: PERCENT EFFECTIVE

CURRICULUM MATHEMATICS

CA.PG.TO	OBJECTIVE DESCRIPTION	STATE	FIRST GRADE	SECOND GRADE	THIRD GRADE	FOURTH GRADE	FIFTH GRADE	SIXTH GRADE	TOTAL
2.01.01	UNDERSTANDING OF NUMERATION SYSTEM	XXX	67	41	28	32	26	45	28	41
2.01.02	IDENTIFICATION OF TERMS AND SYMBOLS	19	74	NT	NT	39	NT	NT	34
2.01.03	UNDERSTANDING OF PLACE VALUE	40	71	63	64	42	36	NT	53
2.01.04	UNDERSTANDING OF MATHEMATICAL LANGUAGE	NT	NT	NT	NT	NT	NT	18	18
2.01.05	KNOWLEDGE OF DIFFERENT NUMERATION SYSTEMS	NT	28	76	NT	85	NT	NT	66
2.02.01	SKILL IN ADDITION AND SUBTRACTION	69	71	44	59	39	54	41	56
2.02.02	SKILL IN MULTIPLICATION AND DIVISION	36	31	81	24	25	36	44	34
2.02.03	SKILL IN USE OF RATIO PROPORTION AND PERCENT	NT	NT	32	NT	NT	40	20	30
2.03.01	ABILITY TO SOLVE NUMBER AND WORD PROBLEMS	85	36	57	38	NT	NT	33	45
2.03.02	SKILLS INVOLVED IN HANDLING MONEY	71	72	NT	62	NT	NT	27	57
2.03.03	INTERPRETATION OF DATA AND GRAPHS	NT	NT	NT	NT	NT	18	37	27
2.03.04	ABILITY TO HYPOTHESIZE AND FIND RELATIONSHIPS	NT	NT	31	NT	NT	NT	NT	31
2.04.01	KNOWLEDGE OF GEOMETRIC LANGUAGE AND SYMBOLS	80	NT	34	58	NT	33	55	45
2.04.02	USE OF BASIC PROPERTIES OF GEOMETRIC FIGURES	NT	44	NT	NT	NT	41	NT	42
2.04.03	ABILITY TO IDENTIFY 1-2-OR 3-DIMENSIONAL FIGURES	46	NT	NT	NT	NT	64	11	41
2.04.04	ABILITY TO ESTIMATE AND COMPUTE MEAS OF GEOM FIGS	NT	NT	NT	NT	NT	NT	15	15
2.05.01	ABILITY TO ESTIMATE FOR CUSTOMARY AND METRIC MEAS	NT	NT	NT	65	NT	36	NT	50
2.05.02	USE OF LENGTH AREA WEIGHT AND CAPACITY MEASURES	NT	44	38	31	NT	13	NT	34
2.05.03	ABILITY TO MEASURE TIME	55	62	NT	NT	NT	NT	NT	56
2.05.05	MEASUREMENT OF TEMPERATURE	NT	41	NT	NT	NT	NT	NT	41
GRADE TOTAL		62	47	49	43	32	39	30	43

TPO TYPE 3

Form 2021

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TERMINAL PERFORMANCE OBJECTIVES SYSTEM
DISTRICT SUMMARY BY CAMPUS

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FOR THIS DISTRICT

DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE: PERCENT EFFECTIVE

CURRICULUM MATHEMATICS

C4.PG.TO	OBJECTIVE DESCRIPTION	DOWLING	WITESIDE	JAMES	MIDDLE	DISTRICT SCHOOL TOTAL
2.01.01	UNDERSTANDING OF NUMERATION SYSTEM	67	37	32	33	41
2.01.02	IDENTIFICATION OF TERMS AND SYMBOLS	19	74	NT	39	34
2.01.03	UNDERSTANDING OF PLACE VALUE	40	66	64	41	53
2.01.04	UNDERSTANDING OF MATHEMATICAL LANGUAGE	NT	NT	NT	18	18
2.01.05	KNOWLEDGE OF DIFFERENT NUMERATION SYSTEMS	NT	61	NT	85	66
2.02.01	SKILL IN ADDITION AND SUBTRACTION	69	58	59	43	56
2.02.02	SKILL IN MULTIPLICATION AND DIVISION	36	45	24	33	34
2.02.03	SKILL IN USE OF RATIO PROPORTION AND PERCENT	NT	32	NT	29	30
2.03.01	ABILITY TO SOLVE NUMBER AND WORD PROBLEMS	85	47	38	33	45
2.03.02	SKILLS INVOLVED IN HANDLING MONEY	71	72	62	27	57
2.03.03	INTERPRETATION OF DATA AND GRAPHS	NT	NT	NT	27	27
2.03.04	ABILITY TO HYPOTHESIZE AND FIND RELATIONSHIPS	NT	31	NT	NT	31
2.04.01	KNOWLEDGE OF GEOMETRIC LANGUAGE AND SYMBOLS	80	34	58	38	45
2.04.02	USE OF BASIC PROPERTIES OF GEOMETRIC FIGURES	NT	44	NT	41	42
2.04.03	ABILITY TO IDENTIFY 1-2- OR 3-DIMENSIONAL FIGURES	46	NT	NT	39	41
2.04.04	ABILITY TO ESTIMATE AND COMPUTE MEAS OF GEOM FIGS	NT	NT	NT	15	15
2.05.01	ABILITY TO ESTIMATE FOR CUSTOMARY AND METRIC MEAS	NT	NT	65	36	50
2.05.02	USE OF LENGTH AREA WEIGHT AND CAPACITY MEASURES	NT	39	31	13	34
2.05.03	ABILITY TO MEASURE TIME	55	62	NT	NT	56
2.05.05	MEASUREMENT OF TEMPERATURE	NT	41	NT	NT	41
CAMPUS TOTAL		62	46	43	34	43

TPO TYPE 4

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PROGRAM GOAL SYSTEM
CAMPUS SUMMARY FOR A GRADE BY TEACHER

CAMPUS Dowling
DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE PERCENT EFFECTIVE

GRADE 02
CURRICULUM MATHEMATICS

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FOR THIS GRADE

CA.PG	OBJECTIVE DESCRIPTION	KINDERGARTEN	1ST GRADE	2ND GRADE	3RD GRADE	4TH GRADE	5TH GRADE
2.01	COMPREHENSION OF SCIENCE OF MATHMATICAL SYSTEMS	XXX 42	XXX 56	XXX 67	XXX 62	XXX 58	XXX 58
2.02	EFFICIENT USE OF BASIC MATH OPERATIONS	48	64	78	67	66	65
2.03	APPLICATION OF MATH CONCEPTS TO PROBLEM-SOLVING	62	76	77	82	71	74
2.04	UNDERSTANDING OF PROPERTIES OF GEOMETRY AND TRIG	45	58	74	69	65	63
2.05	UNDERSTANDING OF STANDARD AND METRIC MEASUREMENTS	39	57	59	69	48	55
TEACHER TOTAL		46	61	72	66	62	62

PG TYPE 1

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PROGRAM GOAL SYSTEM
CAMPUS SUMMARY BY GRADE

CAMPUS Dowling
DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE: PERCENT EFFECTIVE

CURRICULUM MATHEMATICS

CA.PG	OBJECTIVE DESCRIPTION	SCHOOL	GRADE TOTAL
2.01	COMPREHENSION OF SCIENCE OF MATHMATICAL SYSTEMS	58	58
2.02	EFFICIENT USE OF BASIC MATH OPERATIONS	65	65
2.03	APPLICATION OF MATH CONCEPTS TO PROBLEM-SOLVING	74	74
2.04	UNDERSTANDING OF PROPERTIES OF GEOMETRY AND TRIG	63	63
2.05	UNDERSTANDING OF STANDARD AND METRIC MEASUREMENTS	55	55
GRADE TOTAL		62	62

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PROGRAM GOAL SYSTEM
DISTRICT SUMMARY BY GRADE

DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE: PERCENT EFFECTIVE

CURRICULUM MATHEMATICS

CA.PG	OBJECTIVE DESCRIPTION	SECOND GRADE	FOURTH GRADE	FIFTH GRADE	SIXTH GRADE	SEVENTH GRADE	EIGHTH GRADE	DISTRICT GRADE	TOTAL
2.01	COMPREHENSION OF SCIENCE OF MATHEMATICAL SYSTEMS	58	46	32	36	34	44	27	43
2.02	EFFICIENT USE OF BASIC MATH OPERATIONS	65	50	51	47	30	42	38	45
2.03	APPLICATION OF MATH CONCEPTS TO PROBLEM-SOLVING	74	46	44	45	NT	18	31	45
2.04	UNDERSTANDING OF PROPERTIES OF GEOMETRY AND TRIG	63	44	34	58	NT	41	19	35
2.05	UNDERSTANDING OF STANDARD AND METRIC MEASUREMENTS	55	47	38	39	NT	24	NT	39
GRADE TOTAL		62	47	45	43	32	39	30	43

PG TYPE 3

PROGRAM GOAL SYSTEM
DISTRICT SUMMARY BY CAMPUS

DISTRICT Jacobs ISD
CITY Jacobs
STATE TX
TEST DATE 11/78 MATRIX ITEMS ARE: PERCENT EFFECTIVE

CURRICULUM MATHEMATICS

CA.PG	OBJECTIVE DESCRIPTION	DOWLING	WESTSIDE	JAMES	MIDDLE	DISTRICT TOTAL
		XXX	XXX	XXX	XXX	XXX
2.01	COMPREHENSION OF SCIENCE OF MATHMATICAL SYSTEMS	54	49	36	35	43
2.02	EFFICIENT USE OF BASIC MATH OPERATIONS	65	50	47	36	45
2.03	APPLICATION OF MATH CONCEPTS TO PROBLEM-SOLVING	74	45	45	29	45
2.04	UNDERSTANDING OF PROPERTIES OF GEOMETRY AND TRIG	63	40	58	28	35
2.05	UNDERSTANDING OF STANDARD AND METRIC MEASUREMENTS	55	41	39	24	39
CAMPUS TOTAL		62	46	43	34	43

PG TYPE 4